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ABSTRACT

This study examined the impact of a Florida State Department of Education project entitled Fit to Achieve--a cardiovascular fitness education program for elementary school children. Of the teachers implementing the program, 24 elementary physical educators and 134 elementary classroom teachers responded to a survey that asked for information on changes noted in the following areas: children's motivation for, participation in, and knowledge of cardiovascular fitness. The survey was based on the reinforcement of the 3 areas through the use of classroom curriculum materials which included instructional aerobic routine videotapes and an audio tape for 15 minute fitness breaks, developmental written student assignments of an interdisciplinary classroom subject nature, a comprehensive teacher guide which included active learning experience ideas, and a parent guide. The uniqueness of the program centered on physical education teachers (N=60) presenting inservices which guided classroom teachers in grades K-5 who actually implemented the program with their students. The program was implemented for at least a 3 month period (from 1 to 5 days per week) in the participating elementary schools. The results of the study indicated a substantial increase in children's motivation for cardiovascular fitness activity, a moderate increase in children's cardiovascular fitness activity participation after or away from school, and a low to moderate increase in children's cardiovascular fitness knowledge. Eleven recommendations based on survey results are included. Appendixes provide copies of the two survey instruments. (Author/LL)

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A SURVEY ASSESSMENT OF FLORIDA'S FIT TO ACHIEVE PROGRAM

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A SURVEY ASSESSMENT OF FLORIDA'S FIT TO ACHIEVE PROGRAM

Abstract

The study examined the impact of a Florida Department of Education project entitled Fit to Achieve--a cardiovascular fitness education program for elementary school children. Of the many educators implementing the program throughout Florida, 24 elementary physical educators and 134 elementary classroom teachers responded to a survey to provide opinionated information changes in the following areas--children's motivation for, participation in, and knowledge of cardiovascular fitness. The survey was based on the reinforcement of the three areas through the use of classroom curriculum materials which included a) instructional aerobic routine video tapes and an audio tape for 15 minute fitness breaks during the school day, b) developmental written student assignments of an interdisciplinary classroom subject nature, c) a comprehensive teacher guide which included active learning experience ideas, d) and a parent guide for extended reinforcement of the areas at home. The uniqueness of the program centered on physical educators inservicing and guiding classroom teachers in grades K-5 who actually implemented the program with their students. The program was implemented for at least a three month period (from one to five days per week) in the participating elementary schools. The results of the study indicated a substantial increase in children's motivation for cardiovascular fitness activity, a moderate increase in children's cardiovascular fitness activity participation after or away from school, and a low to moderate increase in children's cardiovascular fitness knowledge as judged by the physical educators and classroom teachers.

INTRODUCTION

During the 1991-92 school year, a Florida Department of Education cardiovascular fitness education program entitled "Fit to Achieve" was implemented in elementary schools throughout Florida. The program's purpose was to teach children the skills, knowledges, and attitudes which would enable them to take personal responsibility for their own cardiovascular fitness and to acquire a healthy heart lifestyle.

A unique aspect of the program centered on a collaborative effort between physical educators and classroom teachers to accomplish such aims. The physical education teachers established leadership for the program by providing classroom teachers with aerobic exercise guidance, an understanding of fitness training principles/concepts, and assistance in the use of all Fit to Achieve materials. Classroom teachers were asked to supervise 15 minute aerobic exercise sessions at least three days each week as a supplement to regular physical education programming. The classroom teachers also sought to reinforce cardiovascular fitness knowledge and to stimulate children to be responsible for their own cardiovascular fitness.

CURRICULUM CONCEPTUAL FRAMEWORK AND MATERIALS

The key cardiovascular fitness concepts in the curriculum included a) knowledge of the heart and the body, b) the specificity principle for aerobic endurance, c) overload principle for aerobic endurance, d) progression principle for aerobic endurance, e) warm-up and cool-down, f) frequency, g) intensity, h) time, i) responsible fitness, j) fitness safety, and k) fitness enjoyment. The concepts were presented or reinforced to students through two instructional aerobic exercise video

tapes and one audio tape; through written student assignments which integrate classroom subject knowledge (such as langauage arts) with cardiovascular fitness concepts; and through a parent's guide that offers suggestions for family fitness activities with motivational ideas to encourage children's participation in aerobic exercise. In addition, a teacher's guide was provided for classroom teachers in order to present information on cardiovascular fitness concepts, program implementation options, and suggested experiential learning activities to supplement the written and audio-visual materials for children.

THE SURVEY STUDY

The study concerning the implementation of Fit to Achieve was permitted through a Florida Educational Research Council grant for the purpose of assessing the impact of the program involving:

1. Potential changes in children's aerobic exercise participation.
2. Potential changes in children's motivation for aerobic exercise.
3. Potential changes in children's cardiovascular fitness knowledge.
4. Inservice leadership events carried out by physical education teachers.
5. Curriculum implementation options carried out by classroom teachers.

LITERATURE REVIEW

The importance of the program is based on recent research evidence that American children are fatter than their counterparts of 20 years ago, are not getting enough of the right kinds of exercise, and spend more time watching television than in physical activity (Ross and Pate, 1987). In view of these findings, it is also a concern that 50% of U.S. elementary school children take physical education at less than

professionally accepted frequency levels (less than three days each week), and only 36% of U.S. children have daily physical education (Morrow, 1991). Moreover, there appears to be no national trend of a fitness programming focus in elementary physical education. Given this situation, eclectic programs which have competing outcome priorities, simply cannot promote health-related fitness improvement efficiently (Metzler, 1991).

RATIONALE FOR THE STUDY

Based on this research, there appeared to be a need to a) increase children's frequency of aerobic exercise participation, b) increase children's motivation for aerobic exercise, and c) increase children's knowledge of cardiovascular fitness.

METHOD

A Florida DOE workshop was held in Orlando during August, 1991, for the purpose of training Florida elementary physical educators to assist in the implementation of the Fit to Achieve program. Sixty participants from the state of Florida attended the workshop and were later asked to take part in the study after at least three months of actual program implementation. Two survey questionnaires were developed during fall, 1991, by three university researchers. Survey A was created for the workshop participants (elementary physical educators), and Survey B was created for classroom teachers. On April 1, 1992, all participants were sent a copy of Survey A. Ample copies of the second instrument, Survey B, were also sent to each participant at that time with a request to disseminate survey B to classroom teachers who had implemented Fit to Achieve in the participant's school. All participants and classroom teachers were requested to complete and return their respective surveys

by May 1, 1992, in a preaddressed/stamped envelope to the University of North Florida Physical Education Program. Only those returned surveys with a postmarked date of no later than May 1, 1992, were used in the study. The accepted surveys were subjected to a data analysis involving numerical response or response percent for positive, negative, and neutral feedback. Requested comments about the program were also tabulated by the three researchers.

RESULTS

Survey A

Twenty-six Survey A forms were received from physical educators within the postmark deadline. Two were eliminated because of incomplete survey information which left 24 surveys for analysis; resulting in a 40% response figure for the actual workshop participants. Of the 24 participants involved, 23 indicated that both the school principals and classroom teachers were receptive to the program. A majority of the participants (17) provided inservice training to classroom teachers in their respective schools while 10 also trained other physical education teachers in their own school districts. All but one of the participants introduced Fit to Achieve to all students in their school citing at least the purpose of the program (if not introducing the curriculum materials) prior to actual classroom implementation.

Nearly all of the participants acquired a school or community source for duplicating or funding the duplication of all curriculum materials for classroom use. Nine of the participants did not duplicate the parent guide for home use, and one participant did not duplicate the video tapes. The extent of the audio tape duplication or use could not be ascertained because tapes were not made available to participants at the

time of program implementation; thus, causing willing participants the need to dub from video to audio on their own. Notably, twelve participants collaborated with classroom teachers weekly while four collaborated at least once a month and four others only upon periodic teacher request. Four more participants rarely or never collaborated with classroom teachers for Fit to Achieve.

Three significant reflective questions were asked of the physical educators in the survey. The questions and results were as follows:

1. As a result of implementing Fit to Achieve, do you feel children are increasing their actual participation in aerobic activities after school or away from school?

Concerning this question, 50% (12) of the physical educators answered yes with 10 of the 12 stating that a majority of the students increased their participation. Forty-six percent (11 of 24) could not offer a decisive answer, and one said no.

2. As a result of implementing Fit to Achieve, do you feel children have an increased motivation for aerobic activities at school based on your observations?

Seventy-nine percent (19) of the physical educators replied yes to this question. Of these 19 participants, 17 felt a majority of the students had increased motivation. Twenty-one percent (5 of 24) could not offer a decisive answer, and none of the physical educators said no.

3. As a result of implementing Fit to Achieve, do you feel children's knowledge of cardiovascular fitness has increased based on completed student assignments, tests, or classroom teacher feedback?

Relating to this knowledge question, 54% (13) of the physical educators said there was increased knowledge of cardiovascular fitness

with 11 of the 13 stating that a majority of the students appeared to have increased knowledge. Forty-two percent (10 of 24) could not provide a decisive answer while only one reported that there appeared to be no increased knowledge.

A compilation of candid comments by the physical educator participants involved in Fit to Achieve was reviewed and yielded the following cross section of thoughts:

-"Classroom teachers seemed to be supportive about involvement in future collaboration efforts."

-"A greater video tape variety with level differentiation is needed."

-"We enjoyed it and are making are own additional video tapes."

-"We added increased wellness instruction on our own video tape through closed circuit television. It was fantastic."

-"I chose to use Fit to Achieve in regular PE, not the classroom."

-"The program was not a priority to the district coordinator."

-"There is a fear that the success of the program could reduce PE positions in the future, especially in the wake of budget cuts."

Survey B

Twenty Survey B forms were sent to each of the original 60 physical education workshop participants for dissemination to classroom teachers who were involved in the implementation of Fit to Achieve in their respective schools. Within the postmark date deadline, 134 Survey B forms were received from classroom teachers. All classroom teachers did not respond to every question; thus, leaving a different teacher total for each of the questions.

A large majority of the classroom teachers (112 of 134) implemented video #1 with 60 of the 112 doing so at least three days weekly while

the other 52 used it one to two days each week. Correspondingly, 83 of the 134 classroom teachers implemented video #2 including 30 of the 83 who presented it at least three days weekly and the other 53 who used it one to two days each week. Based on the audio tapes not being readily available as mentioned in the Survey A results, only seven of 134 classroom teachers responding actually utilized the audio tape. Thirty-five attempted cardiovascular learning activities with their students, and 30 had their classes undertake written assignments. Lastly, 115 of the 134 classroom teachers estimated that only 0-10% of parents had any involvement in Fit to Achieve. This occurrence in large part was based on the fact that many schools did not duplicate the Fit to Achieve Parent Guide for home use.

As in Survey A, three similar reflective questions on participation, motivation, and knowledge were asked of each classroom teacher. On some questions, some classroom teachers elected not to provide a response. These no response situations were judged to be "don't know" responses and were included as such on each of the three questions. The reflective questions were again based on opinion because maintaining objective data-based evidence had not been a beginning initiative of the Fit to Achieve program itself. The questions and results were as follows:

1. In your opinion, are children increasing their participation in cardiovascular fitness activities after school or away from school?

Thirty-seven percent (49 of 134) classroom teachers replied affirmatively that students increased their participation after or away from school with 34 of the 49 stating that a majority of their students did so. Five percent (7 of 134) said there was no increase while 58% (78 of 134) simply did not know.

2. In your opinion, are children showing an increased motivation for cardiovascular fitness activities at school based on your observations?

Of considerable note on this question, 66% (89) of the 134 classroom teachers reported that their students demonstrated increased motivation for aerobic activities at school, and 53 of these 89 teachers felt a majority of their students had increased motivation. Only 7% (9 of 134) said there was no increase while 27% (36 of 134) were unable to make a decision.

3. In your opinion, are children showing an increased knowledge of cardiovascular fitness based on results from student assignments or tests?

Concerning this knowledge question, 18% (24 of 134) classroom teachers felt that their students showed an increased knowledge of cardiovascular fitness including 21 that said a majority did. Only 6% (8 Of 134) said no as 76% (102 of 134) simply were unable to give a decisive answer.

A compilation of candid comments by the classroom teachers involved in Fit to Achieve was reviewed and yielded the following cross section of thoughts:

-"It was great on days that we didn't have PE. It gets our mornings started with energy. Kids loved the program."

-"The program sets a good example for children by having adults exercise. I personally benefited mentally and physically."

-"It's just one more thing to do; not even enough time for classroom basics now; too much paperwork as is. The program is worthwhile but difficult for me to schedule."

-"The videos were fun at first, but they became repetitious. Tapes for different age levels, and tapes with more variety are needed."

-"I'll use in it in the future, but there are not enough video tapes or T.V.'s right now."

-"Success of the program truly depends on teacher enthusiasm."

-"Fit to Achieve is a wonderful idea. We made our own exercise and music changes to offset eventual restlessness with the same tapes."

DISCUSSION

Fit to Achieve was a Florida Department of Education cardiovascular fitness education program designed to positively impact the (a) aerobic exercise participation, (b) motivation for aerobic exercise, and (c) cardiovascular fitness knowledge of Florida elementary school children. A follow-up survey, funded by the Florida Educational Research Council, was conducted to assess the success of the program. Although the survey does not provide objective evidence, it does provide ample valuable information from professionals who have attempted to implement an innovative, health-related fitness education program for children.

Both classroom teachers and physical educators viewed Fit to Achieve as a positive supplement to regular physical education programming, yet physical educators emphasized a greater acceptance of its role/impact as seen in Table 1. Most of the physical educators (79%) believed that students acquired increased motivation for aerobic exercise with 70% citing that a majority of students were more motivated. In close proximity, 66% of the classroom teachers noticed increased student motivation for aerobic exercise, but only 40% subscribed that a majority of their students were more motivated. It would appear that the 79% figure and the 66% figure indicate that Fit to Achieve had a substantial impact on developing positive attitudes in children toward aerobic activity during program implementation. This conclusion is related to

the judged impact of the Fit to Achieve curriculum itself without an analysis of the effects of varied teacher enthusiasm or instructional delivery systems employed by the classroom teacher.

About half of the physical educators (50%) believed that student participation in aerobic exercise increased as nearly 40% of the classroom teachers thought there was an increase in student participation also. It would appear that the percentages suggest that Fit to Achieve had a moderate influence on actual student participation in aerobic activity after or away from school during the implementation of the program.

Concerning cardiovascular knowledge, about half of the physical educators (54%) believed that student knowledge increased; however, only 18% of the classroom teachers agreed with this view. The judgement percentage of the physical educators is moderately respectable, but a longitudinal study would be necessary to determine the actual retention levels for the fitness concepts. Although classroom teachers did not indicate even moderate development in this area, the low percentage may be due to the limited use of support materials. Only 30 of 134 classroom teachers utilized written assignments, and only 35 implemented learning activities to reinforce cardiovascular fitness concepts.

In general, responses from the surveys indicated that the aerobic video tapes were highly used and successful. However, both physical educators and classroom teachers mentioned a need for more video taped routines to reduce repetition and increase variety. Although school video taping of creative aerobic routines was a recommended strategy of Fit to Achieve to offset this situation, only a few teachers completed this endeavor. In addition, the Fit to Achieve written assignments and

learning activities were used to a far less degree than the videos.

The classroom teachers reported little parental involvement in the program. This of course is somewhat skewed by the lack of parent guide duplication for home use, but it would appear that a greater concerted effort by physical educators and classroom teachers could have been undertaken to reach parents about the significance of the program for their children.

In retrospect concerning survey information and comments, it appears that collaborative efforts were successful for implementing Fit to Achieve which indicates the vast potential for influencing the healthy lifestyles and fitness habits of children through joint professional efforts. Yet in contrast, there is still the issue of administrators and classroom teachers compromising classroom/academic time for the promotion of healthy lifestyles and fitness habits. Further, based on the classroom teacher concern for growing classroom responsibilities, it is apparent that many classroom teachers will often only use simple fitness education materials given to them that require little effort.

Table 1

Percentage Comparisons of Physical Educator and Classroom Teacher Opinions about Changes in Children's Motivation, Participation, and Knowledge Concerning Cardiovascular Fitness

Reinforcement Areas	Physical Educators	Classroom Teachers
Increased Motivation	79%	66%
Increased Participation	50%	37%
Increased Knowledge	54%	18%

RECOMMENDATIONS

Based on the previous results and discussion, the researchers offer the following recommendations:

1. Provide further inservice of the Fit to Achieve curriculum to an expanded number of physical educators.
2. Develop additional aerobic exercise routines on video tape with an increased variety of music and exercise for children of different developmental levels.
3. Develop additional instructional video tapes about fitness concepts that incorporate learning activities to reinforce cardiovascular fitness knowledge.
4. Develop objective evaluation instruments/procedures to assess changes in children's knowledge, attitudes, and physical activity habits.
5. Establish extended strategies to reach parents about Fit to Achieve and to stimulate their involvement in aerobic participation with their children.
6. Maintain school interest in Fit to Achieve through establishing a recognition program that will reward the effort of school personnel, children, and parents in implementing the program.
7. Develop an ongoing materials bank for sharing collaboration strategies and school-created materials.

ACKNOWLEDGEMENTS

We express our appreciation to Manny Harageones of the Florida DOE for the creation of the program, to the willing collaboration of physical educators and classroom teachers who implemented the program and responded in a timely fashion, and to FERC for the financial support of this study.

References

Metzler, M. (1991). Findings related to children's fitness. Journal of Teaching in Physical Education, 10(4), 375-394.

Morrow, J.R. (Ed.) (1991). Physical education's role in the public health. Research Quarterly for Exercise and Sport, 62(2), 123-163.

Ross, J.G. & Pate, R.R. (1991). A summary of findings: The National Children's and Youth Fitness Study II. Journal of Physical Education, Recreation, and Dance, 58(9), 51-58.

APPENDIX 1

FIT TO ACHIEVE SURVEY INSTRUMENT "A"
(To Be Completed by the Physical Education Teacher)

Name: _____ District: _____
School: _____ Date: _____

1. **How receptive to Fit to Achieve was your school principal?**

   ____Highly Receptive _____Receptive _____Not Receptive

2. **How long did you initially inservice the classroom teachers?**

   ____More than 1 hour ____1 hour or Less ____No Inservice

3. **How have you judged the receptiveness of the majority of the classroom teachers to Fit to Achieve?**

   ___Highly Receptive ____Receptive ____Not Receptive

4. **Did you help provide inservice to other physical education teachers in your school district?**

   ___Yes ___No

5. **What is/was your funding source for the duplication of the Fit to Achieve Teacher Guide and Student Assignments?**

   ___School ___PTA ___Other (please list)

6. **What is/was your funding source for the duplication of the Fit to Achieve Parent Guide?**

   ___School ___PTA ___Other (please list)

7. **What is/was your funding source for video cassette blanks for Fit to Achieve?**

   ___School ___PTA ___Other (please list)

8. **How are/were you able to duplicate video tapes?**

   ___District ITV ___School Media Center ___Other(please list)

9. **Did you (not the classroom teacher) initially introduce all school students to:**

   A. Purpose of Fit to Achieve ___Yes ___No
   B. Video Tape 1 ___Yes ___No
   C. Video Tape 2 ___Yes ___No
   D. Audio Tape ___Yes ___No
   E. C-V Learning Activities ___Yes ___No
   F. Student Written Assignments ___Yes ___No
   G. Parent Guide ___Yes ___No

10. **How would you describe the extent of your ongoing collaboration with classroom teachers for Fit to Achieve?**

___Weekly ___One or More Times A Month ___Only as Requested By Teachers ___Rarely

11. **As a result of implementing Fit to Achieve, do you feel:**

A. Children are increasing their actual participation in C-V fitness activities after school or away from school?

___Yes (Majority or Minority?) ___No ___Don't Know

B. Children have an increased motivation for C-V fitness activities at school based on your observations?

___Yes (Majority or Minority?) ___No ___Don't Know

C. Children's knowledge of C-V fitness has increased based on completed student assignments, tests, or classroom teacher feedback?

___Yes (Majority or Minority?) ___No ___Don't Know

APPENDIX 2

FIT TO ACHIEVE SURVEY INSTRUMENT "B"
(To Be Completed By the Classroom Teacher)

Name: _____ District: _____
School: _____ Grade: _____ Date: _____

1. **During 1991-92, what components of the Fit to Achieve program did you implement?**

   Video 1 ___Yes ___1-2 days weekly ___at least 3 days weekly
   ___No

   Video 2 ___Yes ___1-2 days weekly ___at least 3 days weekly
   ___No

   Audio ___Yes ___1-2 days weekly ___at least 3 days weekly
   ___No

   C-V Learning Activities ___Yes ___No

   Student Assignments ___Yes ___No

2. **In your opinion, are children**

   A. Increasing their participation in C-V fitness activities after school or away from school?

      ___Yes (Majority or Minority?) ___No ___Don't Know

   B. Showing an increased motivation for C-V fitness activities at school based on your observations?

      ___Yes (Majority or Minority?) ___No ___Don't Know

   C. Showing an increased knowledge of C-V fitness based on results from student assignments or tests?

      ___Yes (Majority or Minority) ___No ___Don't Know

3. **Do you have any data-based evidence (assignments, activity charts, tests, etc.) to support your opinion?**

   ___Yes ___No
   (Please enclose if you are able to share evidence now)

4. **What percent of parents of students in your classroom were involved in any aspect of Fit to Achieve?**

   ___0-10% ___11-20% ___21-30% ___31-40% ___41-50% ___above 50%

5. **Please write any comments about Fit to Achieve on the back of this sheet.**